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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/702,625	08/23/1996	HERMANN KLUTH	H1215/1556PC	6917
423	7590	05/04/2004	EXAMINER	
HENKEL CORPORATION THE TRIAD, SUITE 200 2200 RENAISSANCE BLVD. GULPH MILLS, PA 19406			COONEY, JOHN M	
			ART UNIT	PAPER NUMBER
			1711	

DATE MAILED: 05/04/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.



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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Paper No. 0404

Application Number: 08/702,625

Filing Date: August 23, 1996

Appellant(s): KLUTH ET AL.

Daniel S. Ortiz  
For Appellant

**EXAMINER'S ANSWER**

MAILED  
MAY 04 2004  
GROUP 1700

This is in response to the appeal brief filed 2-6-2004.

**(1) Real Party in Interest**

A statement identifying the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) Status of Claims**

The statement of the status of the claims contained in the brief is correct.

**(4) Status of Amendments After Final**

No amendment after final has been filed.

**(5) Summary of Invention**

The summary of invention contained in the brief is correct.

**(6) Issues**

The appellant's statement of the issues in the brief is correct.

**(7) Grouping of Claims**

Appellant's brief includes a statement that claims 15-36 and 40-68 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

**(8) ClaimsAppealed**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(9) Prior Art of Record**

4,263,412	PAULS	4-1981
5,086,175	MINATO ET AL	2-1992

2,084,698                    SCHMALSTEIG ET AL                    6-1993

**(10) *Grounds of Rejection***

The following ground(s) of rejection are applicable to the appealed claims:

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 15-36 and 40-68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pauls in view of Schmalsteig et al.(Canada) and Minato et al.

Pauls discloses preparations of polyurethanes dispensed from a pressure can for dispensing polyurethane foam materials wherein a foam precursor material comprising isocyanate group containing prepolymers having variable isocyanate group content values, blowing agents, catalysts, and other additives is stored under pressure and foamed upon release (see the entire document).

Pauls differs from appellants' claims in that it does not recite monomeric isocyanate contents of its prepolymers or particularly specify the removal of residual monomeric isocyanate from its reactive components. However, CA-2,084,698 (hereon Canada) and Minato et al.(see both documents in their entireties) set forth that the means for removing excess monomer from isocyanate based reactive materials has long been known to the art for the purpose of reducing toxicity. Canada sets forth the more commonly recognized distillation method, and Minato et al. discloses the film

evaporation methods. Accordingly, it would have been obvious for one having ordinary skill in the art to have reduced residual monomer contents of the prepolymers placed in the systems of the Pauls reference by the methods set forth by Canada and/or Minato et al. for the purpose of reducing toxicity in order to arrive at the systems, processes, and products of applicants' claims in the absence of a showing of new or unexpected results attributable to the reduction of the monomer contents of materials used.

Pauls differs from appellants' claims 66-68 in that it is not concerned with readying its cans for non-toxic disposal by reacting unreacted isocyanate with catalysts and or polyol. However, these are notoriously well known means of neutralizing unreacted isocyanate, and an ordinary practitioner with an interest in environmental concerns would have been *prima facie* motivated to make the monetary expense for additional materials to neutralize free isocyanate groups in the expended packs and ready them for disposal. The cited references disclose the various catalytic and other reactive means for accomplishing this isocyanate group neutralization through their disclosed isocyanate group reactions (see each of the documents in their entirety). Accordingly, it would have been obvious to use the conventional isocyanate group neutralizing materials disclosed by the cited references on the residues left in the containers of Pauls for the purpose for the purpose of rendering the containers biologically safe with the expectation of success in the absence of a showing of new or unexpected results.

**(11) Response to Argument**

Appellants argue that an ordinary practitioner would not have the incentive to use the relatively expensive means for neutralizing excess isocyanate in the expended systems of Pauls. However, the fact that these efforts may be expensive relative to their environmental benefits has no bearing whether motivation is evident. An ordinary practitioner in the art would logically and obviously be directed towards using low toxic monomer containing prepolymers available to him in a prepolymer dispensing system if environmental integrity was at the forefront of his endeavors. Appellants' invention as claimed is utilizing that which is known to the art to the achievement of obvious ends and no invention in a patentable sense is seen. Interest in environmental safety is motivation to avoid toxic materials.

Appellants maintain that the cited references are from nonanalogous art. However, it is held that the determination that a reference is from a nonanalogous art is twofold. First, it is decided if the reference is within the field of the inventor's endeavor. If it is not, then it must be determined whether the reference is reasonably pertinent to the particular problem with which the inventor was involved. In re Wood, 202 USPQ 171, 174; In re Clay, 23 USPQ.2d 1058. Disclosures of preparing isocyanate components for polyurethane synthesis having reduced monomeric isocyanate contents is at least pertinent to the endeavors of a referenced inventor who is using isocyanates in preparations of isocyanate components used in prepolymers which are dispensed from cans. The fact that the secondary references may not form foams does not negate their pertinence and relevance to the endeavor of preparing polyurethane products

whose fundamental behaviors at a chemical level are not affected by the presence or absence of a blowing agent. Accordingly, it is maintained that an ordinary practitioner in the polyurethane arts would find the teachings of Canada and Minato et al. relevant and pertinent to the teachings of Pauls.

Appellants argue that the low monomer containing isocyanate based materials of Canada are solid. However, it is not seen that such is evident for the full disclosure of Canada, and, further, it is not seen that the materials encompassed by the full disclosure of Canada excludes liquid low monomer containing isocyanate based materials. Canada is maintained to be relevant and pertinent.

Rejection is maintained above for all of the claims, and no further arguments concerning individual claims, except as set forth below, are held to be needed.

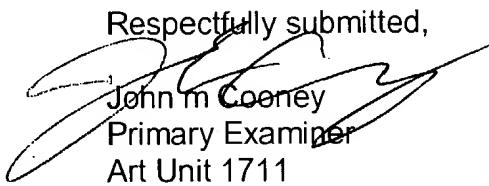
Examiner holds that the NCO content value range of 26-30% (present in claim 28 and 53 ) is not required by all claims, and, further, the Pauls reference discloses flexibility in control of NCO contents. Accordingly, variations in NCO content values is a variable which would have been within the practitioners expertise having the teachings of Pauls before them in order to arrive at the products and/or processes of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results.

The viscosity values of various appellant claims are not specifically recited by the teachings of the cited references. However, these are held to be inherent properties attributable to the liquid condition of the various materials of the instant concern, and patentability based on such a claim element is not seen nor have these values been associated with the patentability in the instant case.

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Art Unit: 1711

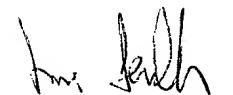
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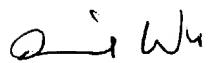
For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,  
  
John M. Cooney  
Primary Examiner  
Art Unit 1711

JMC  
April 27, 2004

Conferees

  
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